## REMARKS

Attached to this response is a Drawing Amendment Approval Request setting out in red ink a proposed change to Figure 8. Applicant respectfully requests that the Examiner approve the proposed change to Figure 8. Once the Examiner has approved the proposed change, Applicant will file a corrected Figure 8.

Claims 1-12 are pending in the application. Applicant hereby confirms Applicant's election by telephone on February 19, 2002, to prosecute claims 1-12. In view of the following remarks, Applicants respectfully request allowance of the pending claims.

### Rejection of Claims 7 Under § 102

Claim 7 has been rejected under 35 U.S.C. § 102 based on U.S. Patent No. 5,323,079 ("Nieves"). For the following reasons, Applicant respectfully submits that claim 7 is now in condition for allowance.

Amended claim 7 recites "a low impedance shunt contacting . . . vent members and . . . metal strands for grading voltage between the vent members and the metal strands." The Examiner has pointed out that Nieves discloses vent tubes 50, stands 54, and a copper conductor member 80. The Examiner appears to argue that these three items correspond to the "vent members," "metal strands," and "low impedance shunt" recited in claim 7. However, Nieves does not teach or suggest that its copper conductor member 80 is "contacting . . . vent members and . . . metal strands." In fact, the copper conductor member 80 of Nieves is actually brazed to upper and lower coil stands to form a "solid series connector." (see col. 4, lines 51-68). In other words, the copper conductor member 80 of Nieves is not "contacting . . . vent members and . . . metal strands," as recited by claim 7. For at least this reason, Applicant submits that Nieves does

not teach or suggest all of the limitations of claim 7. Accordingly, Applicant respectfully requests favorable reconsideration of the rejection of claim 7.

**Rejection of Claim 1 under § 103**

Claim 1 has been rejected under 35 U.S.C. § 103 based on U.S. Patent No. 5,323,079 ("Nieves"). For the following reasons, Applicant respectfully requests favorable reconsideration of the rejection of claim 1.

Claim 1 recites "a compact voltage grading means contacting . . . vent members and . . . metal strands for grading voltage between the vent members and the metal strands." As discussed above with regard to claim 7, while the Examiner has pointed out that Nieves discloses vent tubes 50, stands 54, and a copper conductor member 80, the Examiner has not addressed the fact that Nieves does not teach or suggest anything comparable to Applicant's "compact voltage grading means" that is "contacting . . . vent members and . . . metal strands." Again, the copper conductor member 80 disclosed in Nieves is brazed to upper and lower coil stands to form a "solid series connector." (see col. 4, lines 51-68). The copper conductor member 80 is not "contacting . . . vent members and . . . metal strands," which is an important feature of the invention recited in claim 1. By contacting both the vent members and the metal strands, Applicant's "compact voltage grading means" is able to grade voltage between the vent members and the metal strands to prevent damage caused by overvoltage. Based on at least this patentable difference between the invention recited in claim 1 and Nieves, Applicant respectfully requests favorable reconsideration of the rejection of claim 1.

**Allowed Claims 2-6 and 8-12**

Claims 2-6 and 8-12 were allowed. Applicant thanks the Examiner for the allowance of claims 2-6, which have not been amended herein. Claims 7-12 have been amended herein and may require further consideration by the Examiner.

## CONCLUSION

For the foregoing reasons, Applicants respectfully request favorable reconsideration and allowance of claims 1-12. Should the Examiner have any questions concerning this paper or application, or if any issues remain, the Examiner is respectfully requested to contact Applicant's undersigned attorney to resolve such issue or question.

The commissioner is hereby authorized to charge any appropriate fees due in connection with this paper or credit any overpayments to Deposit Account No. 19-2179.

Respectfully submitted,

Dated: 4/15/02

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## VERSION WITH MARKINGS TO SHOW CHANGES MADE

**IN THE SPECIFICATION:**

**Changes to the paragraph beginning at page 6, line 26:**

An equivalent circuit of the cross-section of an inner cooled coil is shown in FIG 8. With an AC voltage applied to the coil 30 between the copper strands 22 and the ground electrode, a portion of the AC voltage is coupled through the capacitance (C2) that exists between the top and bottom cooling tubes and the copper coil. This coupled voltage results in a large potential difference between the cooling tubes and the coil copper. The voltage drop across a capacitance (C1) is the voltage stress between the tube and copper strands (across the insulation). The magnitude of the voltage [(VD2)] (VC2), depends on the relative values of the distributed capacitance (C1 and C2). The magnitude of potential (VC2) is equal to [V1(SC2/(XC2+XC3))] V1(XC2/(XC2+XC3)). The magnitude of the potential (VC2) can reach several hundred volts with coil rated voltage of V1. The insulation between the copper and vent tubes will fail if VC2 exceeds the dielectric strength of the insulation. Once voltage breakdown occurs, then it is possible to have the copper short to the vent tube.

**IN THE CLAIMS:**

**Please amend claims 7-8 and 10-11 as follows:**

7. (Amended) A high voltage stator coil for a stator of a power generation system, the stator comprising:

a plurality of metal strands;

a plurality of vent members positioned adjacent the plurality of metal strands; and